

WHAT IS CLAIMED IS:

1. An isolated nucleic acid of any one of (a) to (d) below:
 - (a) a nucleic acid encoding a protein comprising the amino acid sequence of SEQ ID NO:2,
 - (b) a nucleic acid comprising a coding region in the nucleotide sequence of SEQ ID NO:1,
 - (c) a nucleic acid encoding a protein that comprises the amino acid sequence of SEQ ID NO:2, in which one or more amino acids are replaced, deleted, inserted and/or added and that is functionally equivalent to the protein comprising the amino acid sequence of SEQ ID NO:2, and
 - (d) a nucleic acid that hybridizes under stringent conditions with the nucleic acid comprising the nucleotide sequence of SEQ ID NO:1, and that encodes a protein functionally equivalent to the protein comprising the amino acid sequence of SEQ ID NO:2.
2. An isolated nucleic acid encoding the amino acid sequence of SEQ ID NO:2 or a fragment thereof.
3. A vector into which the nucleic acid of claim 1 is inserted.
4. A vector into which the nucleic acid of claim 2 is inserted.
5. A transformant harboring the nucleic acid of claim 1.
6. A transformant harboring the nucleic acid of claim 2.
7. A transformant harboring the vector of claim 3.
8. A transformant harboring the vector of claim 4.
9. A substantially purified polypeptide encoded by the nucleic acid of claim 1.
10. A substantially purified polypeptide encoded by the nucleic acid of claim 2.

1 11. A method for producing a polypeptide, the method comprising the steps of
2 culturing the transformant of claim 7 and recovering a polypeptide expressed from the
3 transformant or the culture supernatant thereof.

1 12. A method for producing a polypeptide, the method comprising the steps of
2 culturing the transformant of claim 8 and recovering a polypeptide expressed from the
3 transformant or the culture supernatant thereof.

1 13. An antibody against the polypeptide of claim 9.

1 14. An antibody against the polypeptide of claim 10.

1 15. A polynucleotide that hybridizes with the nucleic acid comprising the
2 nucleotide sequence of SEQ ID NO:1 or the complementary strand thereof and that
3 comprises at least 15 nucleotides.

1 16. A method for screening for a compound that binds to the polypeptide of
2 claim 9, the method comprising the steps of:

- 3 (a) contacting a test sample with the polypeptide or a partial peptide thereof,
4 (b) detecting a binding activity of the test sample to the polypeptide or the partial
5 peptide thereof, and
6 (c) selecting a compound comprising the binding activity to the polypeptide or
7 the partial peptide thereof.

1 17. A method for screening for a compound that binds to the polypeptide of
2 claim 10, the method comprising the steps of:

- 3 (a) contacting a test sample with the polypeptide or a partial peptide thereof,
4 (b) detecting a binding activity of the test sample to the polypeptide or the partial
5 peptide thereof, and
6 (c) selecting a compound comprising the binding activity to the polypeptide or
7 the partial peptide thereof.